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CLAIMS

- 5 1. A safety arrangement for use in a motor vehicle, the safety arrangement incorporating a blocking unit and a reversible drive to drive the blocking unit, in response to a first signal, from an initial position to an operative position, the drive being associated with a timing arrangement to control the drive to return the blocking unit to the initial position after a pre-determined period of time,
10 the arrangement incorporating an energy absorbing element operative to absorb energy as the blocking unit is moved from the operative position by an applied force.
2. A safety arrangement according to Claim 1 wherein a pre-crash sensor is
15 provided and the first drive signal is generated in response to the sensing of a potential crash by the pre-crash sensor.
3. A safety arrangement according to Claim 1 or Claim 2 wherein the reversible drive incorporates a rack.
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4. A safety arrangement according to Claim 1 or Claim 2 wherein the reversible drive incorporates a piston and cylinder unit.
5. A safety arrangement according to any one of the preceding Claims
25 wherein the blocking element incorporates a contact sensor to supply a signal when the blocking element is moved into contact with an object to stop the blocking unit from being driven further towards the operative position.

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6. A safety arrangement according to any one of the preceding Claims wherein the energy absorbing element is an inflatable element, that is inflated in response to a second signal.

5 7. A safety arrangement for use in a motor vehicle, the safety arrangement incorporating a blocking unit and a reversible drive to drive the blocking unit, in response to a first signal, from an initial position to an operative position, the drive being associated with a timing arrangement to control the drive to return the blocking unit to the initial position after a pre-determined period of time,
10 the arrangement incorporating an energy absorbing element operative to absorb energy as the blocking unit is moved from the operative position by an applied force, wherein the energy absorbing element is an inflatable element that is inflated in response to a second signal.

15 8. A safety arrangement according to Claim 7 wherein a pre-crash sensor is provided and the first drive signal is generated in response to the sensing of a potential crash by the pre-crash sensor.

9. A safety arrangement according to Claim 7 or Claim 8 wherein the
20 reversible drive incorporates a rack.

10. A safety arrangement according to Claim 7 or Claim 8 wherein the reversible drive incorporates a piston and cylinder unit.

25 11. A safety arrangement according to any one of Claims 7 to 10 wherein the blocking element incorporates a contact sensor to supply a signal when the blocking element is moved into contact with an object to stop the blocking unit from being driven further towards the operative position.

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12. A safety arrangement according to any one of Claims 6 to 11 wherein a crash sensor is provided and the second signal is generated in response to the sensing of a crash by the crash sensor.

5 13. A safety arrangement according to Claim 12 wherein the crash sensor indicates the degree of severity of a crash.

14. A safety arrangement according to any one of the preceding Claims wherein the safety arrangement provides front protection for a seat occupant in
10 the event of a crash.

15. A safety arrangement according to any one of the preceding Claims wherein the seat is provided with a sensor to sense a parameter.

15 16. A safety arrangement according to Claim 15 wherein the sensor is able to detect the presence and weight of an occupant of the seat.

17. A safety arrangement according to Claim 15 or Claim 16 wherein the sensor is a seat position sensor, able to sense the position of the seat in the
20 direction of the longitudinal axis of the vehicle.

18. A safety arrangement according to any one of Claims 6 to 17 wherein the inflatable element is inflated by a multistage gas generator, the gas generator being controlled by a controller responsive to sensed parameters.

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19. A safety arrangement according to any one of Claims 1 to 18 wherein the energy absorbing element is part of the drive.